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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/916,146 | 07/26/2001 | Richard A.A. Heylen | 204 | 8208 |

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PATENT DEPARTMENT
MACROVISION CORPORATION
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EXAMINER

SCHUBERT, KEVIN R

ART UNIT PAPER NUMBER

2137

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/916,146 | Applicant(s) HEYLEN, RICHARD A.A. | |
| | Examiner Kevin Schubert | Art Unit 2137 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-7,9-12,14-16,18,19,25-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-7,9-12,14-16,18,19,25-27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>20060428</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 2-3,5-7,9-11,12,14-16,18-19,25-27, and 29-32 have been considered.

Continued Examination Under 37 CFR 1.114

5 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/06 has been entered.

10

Specification

The Specification is objected to in accordance with the 112, first paragraph, issue below.

Claim Rejections - 35 USC § 112

15 The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20

Claims 2-3,5-7,9-11,12,14-16,18-19,25-27, and 29-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

25

Specifically, new claims 30-32 now recite the limitation "wherein the data patterns are of the type provided by an *encoder of a conventional laser beam recorder*". After consideration of the Specification and paragraphs 6 and 7 which applicant notes for support, Examiner finds no disclosure of data patterns being provided by a "conventional" encoder. In contrast, Examiner finds that the claimed data patterns

30

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may be provided by "much more sophisticated encoders used in mastering houses" (Specification: paragraph 6) and that standard CD encoders fail to provide the claimed data patterns (paragraph 6). Appropriate correction or specific reference to where such feature is disclosed in the Specification is required.

5

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10

Claims 2-3,5-7,9-11,12,14-16,18-19,25-27, and 29-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, new claims 30-32 now recite the limitation "wherein data patterns are of the type provided by an *encoder of a conventional laser beam recorder*". Specifically, it is unclear what constitutes an "encoder of a conventional laser beam recorder". For example, it is unclear whether a commercially available standard CD writer is an "encoder of a conventional laser beam recorder". Examiner notes that if such is this case, an inconsistency appears to be present between the claims and the Specification as the Specification apparently teaches that the data patterns cannot be accurately provided by standard CD writers (e.g. Specification, paragraph 6).

20

It is also unclear whether a "much more sophisticated encoder used in mastering houses" is an "encoder of a conventional laser beam recorder". Further, perhaps any encoder employing a laser beam recorder is intended to meet an "encoder of a conventional laser beam recorder" since any encoder employing a laser beam recorder is using an established (perhaps conventional?) laser beam recording technique. Appropriate correction is required.

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Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- 5 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10 Claims 3,5-7,9,12,14-16,18-19,25-27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Hogan, U.S. Patent No. 5,699,434.

As per claims 30-32, the applicant describes a method comprising the following limitations which are met by Hogan:

- 15 a) providing data patterns on the disc arranged such that the disc patterns cannot be accurately copied onto another disc by a writer for recordable discs which has a limited ability to look ahead during encoding, wherein the data patterns have a DSV (digital sum value) which has a rapid rate of change over time wherein the transition in the EFM (eight to fourteen modulation) signal from the data patterns are shifted from their ideal values or the ability of disc drives to maintain optimal head positioning is compromised (Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41; Figs 3A,3B,3C,3D);
- 20 b) the data patterns making up an authentication signature, and applying the authenticating signature to the optical disk along with other data (Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41; Figs 3A,3B,3C,3D);
- c) wherein the data patterns are of the type provided by an encoder of a conventional laser beam recorder (Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41; Figs 3A,3B,3C,3D).

25

As per claim 3, the applicant describes the method of claim 30, which is met by Hogan, with the following limitation which is also met by Hogan:

Wherein successful operation of the copy protected disc requires that the disc be present in the drive and that a correct authenticating signature be readable therefrom (Fig 1; Col 4, lines 18-21).

As per claims 5,14, and 25, the applicant describes the method of claims 30-32, which are met by Hogan, with the following limitation which is also met by Hogan:

Wherein the provided data patterns additionally to the rapid rate of change ensure that the DSV
5 has an absolute value significantly greater than usual (Col 3, lines 43-47).

As per claims 6,15, and 26, the applicant describes the method of claims 30-32, which are met by Hogan, with the following limitation which is also met by Hogan:

Wherein the provided data patterns are repeated patterns of values (Fig 3A, 3B, Col 3, lines 48-
10 59).

As per claims 7,16, and 27, the applicant describes the method of claims 30-32, which are met by Hogan, with the following limitation which is also met by Hogan:

Wherein the size of the provided data patterns is predetermined (Col 6, lines 42-49).
15

As per claims 9,18, and 29, the applicant describes the method of claims 30-32, which are met by Hogan, with the following limitation which is also met by Hogan:

Wherein the provided data patterns arranged to produce a DSV which has a substantial low frequency component lower than that of the lowest signal frequency that does not cause DSV problems
20 (Col 5, lines 51-63; Fig 3B).

As per claim 12, the applicant describes the disc of claim 31, which is met by Hogan, with the following limitation which is also met by Hogan:

Wherein the provided data patterns have a size and/or nature which ensures that they cannot be
25 accurately written by a writer of recordable discs (Col 3, lines 48-59; Col 1, lines 19-23).

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As per claim 19, the applicant describes the disc of claim 31, which is met by Hogan, with the following limitation which is also met by Hogan:

Wherein the data patterns are put in a plurality of sectors on the optical disc (Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41).

5

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan in view of Newman, U.S. Patent No. 6,353,890.

20

As per claim 2, the applicant describes the method of claim 30, which is met by Hogan, with the following limitation:

Wherein the existence of corrupted or otherwise incorrect data in a particular sector on the optical disc signifies that that disc is not original whereby its use may be prevented (Newman: Col 10, lines 14-21);

25

Hogan describes all the limitations of claim 30. However, Hogan appears to fail to identify the use of corrupt or incorrect data on a particular sector to signify that the disc is not original. The errors in Hogan's system only serve to create a large DSV which inhibits copying of the disc. The errors in Newman's system serve to signify that the disc is or is not original. If the disc is not original, its use is not permitted.

30

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Newman with those of Hogan and allow for the data patterns to authenticate

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whether use of a disc is or is not permitted because doing this adds an additional security feature in the system.

As per claim 10, the applicant describes the method of claim 30, which is met by Hogan, with the
5 following limitation which is met by Newman:

Wherein the authenticating signature is also made up of sectors containing only zeros which are provided both before and after sectors containing the chosen data patterns (Newman: Col 3, lines 15-20; Col 3, lines 60-65);

Hogan describes all the limitations of claim 1. However, Hogan appears to fail to describes the
10 use of padding sectors with zeros before and after sectors containing chosen data patterns. Newman discloses that an error free sector (containing only zeros) may adjoin a sector of error data patterns for ease in processing. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Newman with those of Hogan and add sectors containing only zeros before and after the sectors containing data patterns because doing so makes it easier for reading
15 devices to proves information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally
20 be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status
25 information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

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about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KS


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER